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Defense Information Infrastructure (DII)

Common Operating Environment (COE)

Version 3.1

System Administrator's Guide (HP-UX 10.20 and Solaris 2.5.1)

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Preface

The following conventions have been used in this document:

[HELVETICA FONT]	Used to indicate keys to be pressed. For example, press [RETURN].
Courier Font	Used to indicate entries to be typed at the keyboard, operating system commands, titles of windows and dialog boxes, file and directory names, and screen text. For example, execute the following command: <pre>tar xvf /dev/rmt/3mn</pre>
"Quotation Marks"	Used to indicate prompts and messages that appear on the screen.
<i>Italics</i>	Used for emphasis.

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1. Introduction

This document describes general information about the Defense Information Infrastructure (DII) Common Operating Environment (COE) and the system administration utilities of the DII COE kernel.

This guide is divided into the following sections and appendices:

Section/Appendix	Page
Introduction Provides a high-level overview of the DII COE and provides a list of additional sources of information.	3
DII COE Environment Lists hardware components and kernel components.	7
Operating Guidelines Explains startup and shutdown of the hardware.	9
DII COE Kernel and Segment Installation Overview Provides instructions for performing local, remote, and network installations of the DII COE kernel and software segments.	11
Common Desktop Environment Provides information about using the Common Desktop Environment (CDE) to provide a standard environment for managing applications and functions.	13
System Administration Utilities Describes DII COE maintenance and management functions available to a system administrator.	21
Error Recovery Guidelines Describes potential problems, errors, and solutions.	67
CSE-SS Functionality Provides an overview of the CSEXDM, CSECON, CSEPAS, and CSELCK segments.	71
Communications Provides information about networks, physical interfaces to the system, communications and broadcast configuration, and troubleshooting.	81
Multiple Monitor and Keyboard Configurations Shows recommended single-eye and dual-eye configuration schemes.	91
Database Size Limits Lists database limits for various DII COE files.	93
Allocating More Disk Space on an LVM Configured System Describes how to allocate more disk space on an logical volume manager (LVM) configured HP system using the HP-UX System Administration Manager (SAM).	97

1.1 The DII COE Kernel

The DII COE kernel consists of the DII COE software required on every workstation. The kernel provides the commercial software of X Windows, Motif, and UNIX, as well as the DII COE System Administration, Security Administration, and runtime environment software. Figure 1 shows a graphical representation of the DII COE kernel and the segment installation process. Reference the *DII COE Integration and Runtime Specification* for more information about the DII COE. Refer to the *DII COE Kernel Installation Guide (HP-UX 10.20)* and the *DII COE Kernel Installation Guide (Solaris 2.5.1)* for more information about installing the DII COE kernel and segments.

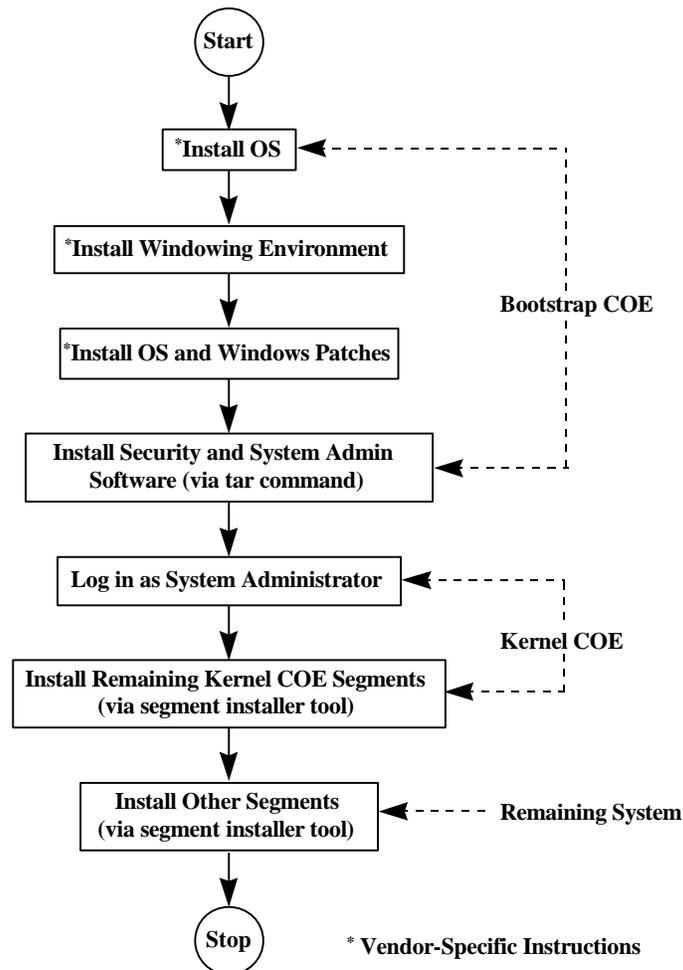


Figure 1. DII COE Kernel and Segment Installation

1.2 Referenced Documents

Reference the following documents for more information about the DII COE and about CDE:

- C *Defense Information Infrastructure (DII) Common Operating Environment (COE) Integration and Runtime Specification* Version 2.0, DII COE I&RTS:Rev 2.0, Inter-National Research Institute (INRI), October 23, 1995
- C *Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.0.1.0 Kernel Installation Guide (HP-UX 10.20)*, DII.3010.HP1020.IG-1, Inter-National Research Institute (INRI), April 14, 1997
- C *Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.0.0.3 Kernel Installation Guide (Solaris 2.5.1)*, DII.3003.Sol251.IG-2, Inter-National Research Institute (INRI), April 7, 1997
- C *Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.1 Security Manager's Guide (HP-UX 10.20 and Solaris 2.5.1)*, DII.31.HPSOL.SMG-1, Inter-National Research Institute (INRI), April 14, 1997.

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2. DII COE Environment

This section describes DII COE hardware components and DII COE kernel components. Supported UNIX host computers for the current DII COE are:

- Ⓒ HP
- Ⓒ Sun SPARC.

2.1 Hardware Components

The software may reside on a single disk or across multiple disks.

2.1.1 HP Hardware

- Ⓒ HP 9000/7xx, with at least 64 megabytes (MB) of random access memory (RAM)
- Ⓒ Hard disk drive [at least 1.2 gigabytes (GB) or larger].

2.1.2 Sun SPARC Hardware

- Ⓒ Sun SPARC with at least 64MB of RAM
- Ⓒ Hard disk drive (at least 1.2GB or larger).

2.2 Kernel Components

The DII COE kernel is a suite of applications layered on top of the HP-UX 10.20 Operating System or the Solaris 2.5.1 Operating System. The DII COE kernel media contains software relating to several areas:

- Ⓒ Operating system
- Ⓒ System and Security Administration software
- Ⓒ X Windows system software
- Ⓒ Motif system software
- Ⓒ CDE
- Ⓒ Distributed Computing Environment (DCE) (Solaris only).

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3. Operating Guidelines

This section provides operating guidelines for powering up and powering down the system.

3.1 Power Down

NOTE: Never power down the system without first executing a shutdown, as described in the steps below. Doing so could cause irreparable damage.

- STEP 1: **Log in.** Log in with a `sysadmin` account and password at the prompts.
- STEP 2: **Shut down the machine.** Select the `Shutdown` option from the `Hardware` pull-down menu and respond to the appropriate prompts.
- STEP 3: **Wait until the system is fully down.**
- STEP 4: **Turn off the peripherals.** Turn off the peripherals, including the monitor.
- STEP 5: **Turn off the computer.**

3.2 Power Up

- STEP 1: **Turn on the Uninterruptable Power Supply (UPS).** Turn on the UPS if necessary.
- STEP 2: **Turn on the peripherals.** Turn on the peripherals, including the monitor.
- STEP 3: **Turn on the computer.**
- STEP 4: **Log in.** Log in with your assigned account and password at the prompts.

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4. DII COE Kernel and Segment Installation Overview

This section provides an overview of installation procedures for the DII COE kernel tape and one or more application segment tapes (e.g., Netscape).

NOTE: Applications are designed to run with specific operating systems. Before installing any operating system or any segment, make sure the tape you are loading is the correct one. This can be verified by checking the label on the tape.

NOTE: The DII COE is installed using an automated installation procedure that removes previously installed software and overwrites existing data files. This type of installation is called a *destructive installation*. Therefore, it is advised that you back up any data you want to save before beginning any installation procedure.

4.1 Installing the Operating System and Kernel

Reference the *DII COE Kernel Installation Guide (Solaris 2.5.1)* and the *DII COE Kernel Installation Guide (HP-UX 10.20)* for details on installing the operating system and kernel for the respective system.

4.2 Installing Segments

Installation of the DII COE and DII COE segments varies depending on the hardware architecture, the processor, and the type or number of segments being loaded.

Segments may be loaded or installed from tape drive or from hard disk. The source can be local, remote, or network:

- Ⓒ Local—from a tape drive physically attached to the machine
- Ⓒ Remote—from a tape drive physically attached to another machine
- Ⓒ Network—from a segment installation server attached to the local area network (LAN).

4.2.1 Local Installation

To install DII COE segments locally, use the segment tapes and a tape drive attached to the machine being installed. The tape drive and the distribution medium must be compatible. For example, a 4mm DAT drive cannot be used to load or install an application delivered on a cartridge tape. Installing from a local source is convenient because it does not rely on a network to reach another machine. Refer to Section 6.3.1, *Segment Installer Option*, for more information about installing segments.

4.2.2 Remote Installation

To install DII COE segments from a remote source, the machine being loaded must have network capability. In addition, you need to know the remote machine's system name or IP address. A remote source is used when a local tape drive is unavailable or when the tape drive on the machine being installed is incompatible with the tapes. For example, an HP segment can be loaded or installed from an HP workstation or from a Sun SPARCstation. Refer to Section 6.3.1, *Segment Installer Option*, for more information about installing segments.

4.2.3 Network Installation

To install DII COE segments from a network source, the segments must first be loaded onto one or more segment servers (the hard disk of one or more network machines). Loading a segment is different than installing a segment. Loading a segment on a machine stores the segment on the machine, but does not enable the segment to run. Instead, segments stored on a segment installation server are available for installation without the installation medium because they are located on a server. Segments can, then, be installed individually on each machine on the network. However, network installations require the system to be configured with networking capabilities. Refer to Section 6.3.2, *Segment Installation Server Option*, for more information about loading segments on a segment installation server.

<p>NOTE: Loading segments on multiple machines is highly recommended because it ensures easy access to the software and does not require the user to locate segment installation tapes.</p>
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5. Common Desktop Environment

The DII COE kernel is a suite of applications layered on top of the HP-UX or Solaris Operating System. The Common Desktop Environment (CDE) is one of several software programs that comprise the kernel. CDE provides a standard environment for managing applications and functions within one or more workspaces. To help organize your desktop, you can place special applications in a particular workspace and name that workspace accordingly.

The CDE has a horizontal window at the bottom of the display called a Front Panel, which is a desktop window that exists in all workspaces. The CDE remains open as different workspaces are opened. Figure 1 shows a CDE Front Panel. The panel below includes the following icons: Clock, Calendar, File Manager, Text Editor, Mailer, Workspace Switch, lock, Graphical Workspace Manager (GWM), EXIT, Default Printer, Style Manager, Application Manager, Help Manager, and Trash Can. These icons are controls and indicators for completing tasks. The controls and indicators shown in Figure 2 are described in greater detail in the following subsections.



Figure 2. CDE Front Panel

5.1 Subpanels

The default Front Panel contains subpanels. Controls with subpanels have a button with an upward arrow above them. This button is used to display or close the subpanel. For example, the Text Editor—Personal Applications, Personal Printers, and Help Manager controls have subpanels (Figure 3). Subpanels contain an `INSTALL ICON` control, which allows the user or system administrator to customize the Front Panel, an icon that will start the application, and other controls. Dropping a file, folder, or action icon on the `INSTALL ICON` control installs the file, folder, or action item in that subpanel.

To open a subpanel, click the arrow button above the control. To close a subpanel, click the down arrow that appears at the bottom of the subpanel.

NOTE: If you have not moved a subpanel from its initial position, it closes automatically when you choose a control.

Initially, the Text Editor—Personal Applications, Personal Printers, and Help Manager controls have subpanels. In addition, you can add subpanels to other controls. The CDE can be customized: Your front panel may contain additional subpanels, and the subpanels may contain additional or different controls. In other words, you can add controls to subpanels, interchange Front and subpanel controls, add subpanels, add or delete workspaces, or rename workspaces.

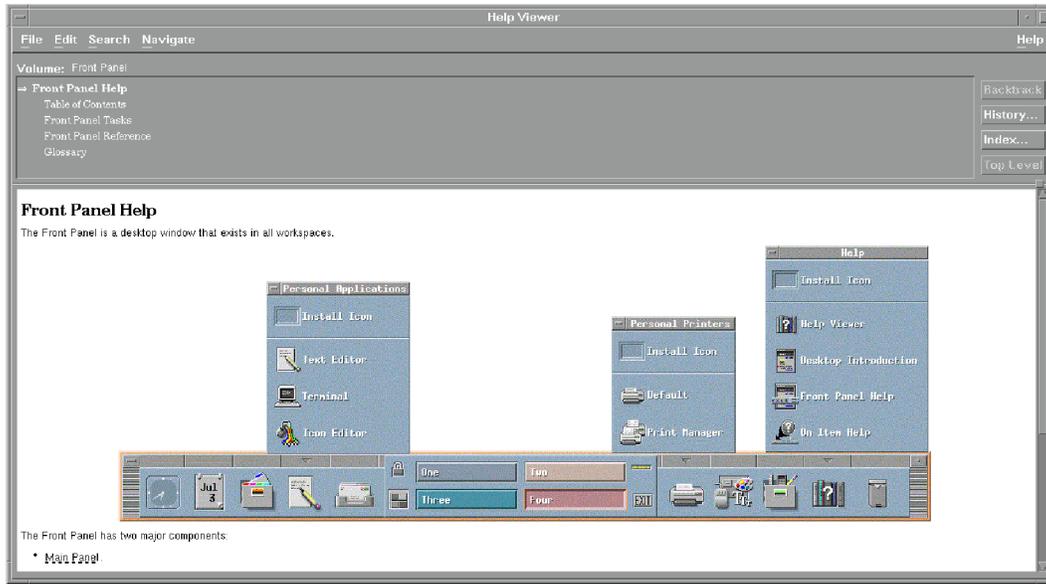


Figure 3. CDE Subpanels

5.1.1 Adding and Removing Subpanels

Follow the steps below to add or remove a subpanel.

- STEP 1: Indicate which subpanel should be added or removed.** Point to the control in the front panel whose subpanel you want to add or remove.
- STEP 2: Add or remove the subpanel.** Choose Add Subpanel or Delete Subpanel from the control's pop-up menu (see subsection 5.3, *Pop-up Menus*, for more information about pop-up menus).

5.1.2 Moving a Subpanel

Follow the steps below to move a subpanel.

- STEP 1: Indicate which subpanel should be moved.** Point to the subpanel's window frame.
- STEP 2: Move the subpanel.** Hold down the left mouse button as you drag the subpanel to its new location.

5.2 Controls and Indicators

The CDE contains controls and indicators. A control, when selected, allows the user to access applications and utilities. The Calendar, File Manager, Mailer, Workspace Switch, Lock, Graphical Workspace Manager (GWM), Exit, Printer, Style Manager, Application Manager, Help Manager, and Trash Can are examples of controls. An indicator does not have a specific action when selected—it simply provides information. The Clock and the Busy Light are two examples of indicators.

The default indicators and controls that comprise the CDE are described in the following subsections as they appear from left to right on the CDE front panel. Since it can be customized, your Front Panel may contain additional or different controls.

5.2.1 Clock

The Clock is an indicator that displays the current time, which is maintained by the operating system.

5.2.2 Calendar

The Calendar is a control that displays the system date. Click on the Calendar to start the Calendar application. The Calendar application enables scheduling of appointments and creation of To Do lists. Day, week, month, and year calendar views are available. Appointments can be scheduled, deleted, and listed.

5.2.3 File Manager

The File Manager control opens a view of your home folder or of a selected folder. This application is used to manage the files and directories of a system, as well as to create, edit, rename, and delete files and folders. Click on the File Manager control to open a view of your home folder, or drop a file on the File Manager control to open a view of the dropped folder.

5.2.4 Text Editor—Personal Applications

The Text Editor—Personal Applications control is used to edit text. Click on the Text Editor control to start the desktop Text Editor application. Dropping a file on the Text Editor control opens the file in a new Text Editor window.

This control position is reserved for a personal application of your choice. To place an application other than the Text Editor in this control position, install the new application icon in the Personal Applications subpanel. Applications are installed from the Application Manager (see Section 5.2.13, *Application Manager*) by dragging the icon from the Application Manager window to the Install Icon control. Once the application is installed in the Personal Applications subpanel, you can use the control's pop-up menu to place that control in the Front Panel.

NOTE: These icons may not function based on profile selection.

Using this same installation process, you can store frequently used applications in the Personal Applications subpanel, such as the Terminal control, and the Icon Editor control. These two controls are discussed in the following subsections.

5.2.4.1 Terminal

The Terminal control is used to open a terminal emulator window. Click on the Terminal control to open the window.

NOTE: For security reasons, this option has been removed from the CDE Front Panel for all users except `root`. Root users can access the Terminal control from the Text Editor—Personal Applications control subpanel.

If you are logged in with a System Administration account and want to access a terminal emulator window, follow the steps below:

- STEP 1: Double-click on the Application Manager control on the CDE Front Panel to open the Application Manager window.
- STEP 2: Double-click on the `DII_APPS` folder in the Application Manager window to open the Application Manager - `DII_APPS` folder.
- STEP 3: Double-click on the `SA_Default` folder to open the Application Manager - `SA_Default` window. This window contains both a `DTterm` icon and an `XTerm` icon.
- STEP 4: Double-click on either the `DTterm` icon or the `XTerm` icon to open the window.

5.2.4.2 Icon Editor

The Icon Editor control is used to create new icons (bitmap and pixmap files) or edit existing icons. Click on the Icon Editor control to open the Icon Editor application.

5.2.5 Mailer

The Mailer control is used to create, send, and receive electronic messages and attachment files. Click on the Mailer control to start the Mailer application. To mail one or more files, select the file(s) in File Manager, drag the file(s) from File Manager and drop them on the Mailer control, type the subject and destination address(es) into the `New Message` dialog box, and click on the `Send` button.

The Mailer control includes an indicator, which indicates the arrival of new mail. Dropping a file on the Mailer control opens the file's contents in the Mailer's `New Message` window.

5.2.6 Workspace Switch

The Workspace Switch allows you to change workspaces. To help organize your desktop, you can place special applications in a particular workspace and name that workspace accordingly. Each workspace, therefore, contains only those applications and functions you want to group together. The Workspace Switch is located in the center of the CDE Front panel. It contains buttons with the words "One", "Two", "Three", and "Four", which are controls used to select one of four workspaces. The button for the current workspace is "pushed in" (i.e., inset from the other three). To change the name of the current workspace, click its button and edit the name in the button.

5.2.7 Lock Control

The Lock icon locks the display and keyboard, thereby preventing unauthorized input. No input from your keyboard or mouse will be allowed until you unlock the display with your password. Click on the Lock control to lock the display.

5.2.8 GWM Control

The GWM control is used to start the Graphical Workspace Manager (GWM), which provides a visual representation of the application windows available in all of the workspaces. The GWM is used to control the size, placement, and operation of windows within multiple workspaces, as well as maintain a depiction of the windows as the user creates, moves, and otherwise manipulates them. Click on the GWM control to start the GWM application.

5.2.9 Busy Light Indicator

The Busy Light indicator blinks to indicate that the system is running an action.

5.2.10 EXIT Control

The EXIT control is used to log out of the desktop and end the desktop session. Click on the EXIT control to end the current session.

5.2.11 Personal Printers

The Personal Printers control displays the status of the default printer and allows cancellation of print jobs on that printer. Click on the Printer control to open the Printer Jobs dialog box, which shows the status of print jobs on the default printer. Drag a file from the Application Manager of the File Manager and then drop them onto the Printer control to print them on the default printer.

The Personal Printers subpanel contains the following applications: Install Icon, Default Printer, and Print Manager. Install Icon is used to install an icon dragged from File Manager or Application Manager onto the subpanel. Print Manager is used to print a file on the default printer.

5.2.12 Style Manager

The Style Manager is used to customize the appearance and behavior of your desktop session. Specifically, the Style Manager control allows customization of the backdrop, keyboard, screen, fonts, colors, mouse, startup, beep, and window. Click on the Style Manager control to start the Style Manager application. If the application is already running, its window is raised to the top of the window stack.

5.2.13 Application Manager

The Application Manager is a container for the applications registered on your system. Click on the Application Manager control to open an `Application Manager` window. This window contains folders of application groups, such as tools and applications. These folders contain icons that, when selected, start applications.

5.2.14 Help Manager

The Help Manager control lists information about CDE topics. Click on the Help Manager control to open a `Help View` window displaying the top level of help information. The help available on your system is organized hierarchically. The top level lists all the help “families” on your system. When you click on a family to open it, you will see a list of all the help “volumes” in that family. The Index feature in the `Help View` window is used to search for topics.

The Help Manager subpanel contains the following applications: Desktop Introduction, which provides an introduction to the desktop; Front Panel Help, which provides an introduction to the front panel of the CDE; and On-Item Help, which provides information on a selected control.

5.2.15 Trash Can

The Trash Can stores files for deletion. Click on the Trash Can control to open the `Trash Can` window. Dropping a file or folder on the Trash Can control moves the file or folder to the Trash Can. The Trash Can is emptied by opening the Trash Can, selecting files to be deleted, choosing `Shred` from the `File` menu or from the `Trash Can` pop-up menu, and then clicking `OK` in the confirmation window.

5.3 Pop-up Menus

CDE Front Panel controls include pop-up menus. The contents of a control’s pop-up menu depends on the behavior of the control and its location. To display a Front Panel pop-up menu, point to the control and press the right mouse button.

5.3.1 Pop-up Menus for Front Panel Controls

If the control starts an application, the first entry in the menu is a command that starts the application. Choosing the menu option has the same effect as clicking on the control. If the Front Panel control does not have a subpanel, clicking on the control with the right mouse button will display the following pop-up menu options: [Name of the control], Add Subpanel, and Help.

[Name of the control]

Starts the application (if the control starts an application).

Add Subpanel

Adds a subpanel to the control.

Help

Displays on-line help for the control.

5.3.2 Pop-up Menus for Front Panel Controls with Subpanels

If the Front Panel control has a subpanel, clicking on the control with the right mouse button will display the following pop-up menu: [Name of the control], Remove Subpanel, and Help.

[Name of the control]

Starts the application (if the control starts an application).

Remove Subpanel

Removes the subpanel and its contents.

Help

Displays on-line help for the control.

5.3.3 Pop-up Menu for the Switch Area

The switch area is the portion of the workspace switch not occupied by other controls or workspace buttons. The pop-up menu contains the following options: Add Workspace and Help.

Add Workspace

Adds a workspace.

Help

Displays help for the workspace switch.

5.3.4 Pop-up Menu for Workspace Buttons

Workspace buttons are used to change workspaces. Each button has its own menu, which contains the following options: Add Workspace, Delete, Rename, and Help.

Add Workspace

Adds a workspace.

Delete

Deletes the workspace.

Rename

Turns the button label into a text field for editing the name.

Help

Displays help for the workspace switch buttons.

5.3.5 Pop-up Menu for Subpanel Controls

The pop-up menu for subpanel controls includes a command for making a particular control the current Front Panel control. The pop-up menu contains the following options: Copy to Main Panel, Remove, and Help.

Copy to Main Panel

Duplicates the control in the Front Panel, replacing the current Front Panel control.

Remove

Removes the control from the subpanel.

Help

Displays on-line help for the control.

6. System Administration Utilities

This section describes the DII COE System Administration application, which provides options for DII COE maintenance and management. To access utilities, log in with a system administration user account.

Options are grouped according to their functionality and are located on pull-down menus or as icons within the application manager. Some options may have a cascading menu. Availability of specific menu options depends on two criteria:

- C Hardware type (e.g., HP or SPARC)
- C Access assigned to the user account profile.

The System Administration application has the following pull-down menus: *SA System*, *Hardware*, *Software*, and *Network*. In addition, some system administration tasks may be performed from the command line. These system administration utilities are described in the following sections.

System Administration Functionality	Page
SA System Menu Describes how to select and configure printers, manage print jobs, and close windows.	22
Hardware Menu Describes how to reboot or shut down the system, mount file systems, format hard drives, and initialize floppy disks.	26
Software Menu Describes how to load or install segments.	33
Network Menu Describes how to change the machine ID, edit host information, set the system time, configure a workstation as a Domain Name Server (DNS), set routing configuration, configure mail on a workstation, configure Network Information Service (NIS), and configure DCE.	42
Removing Global Data Describes how the system administrator can use the COERemoveGlobal command line tool to remove global data, thereby making a segment accessible only to the local machine.	60
Changing Workstation Security Levels Describes how to change the security level of an HP or SPARC workstation.	61
Auditing Describes how to enable and disable auditing on both HPs and SPARCs.	63
Changing the <code>sysadmin</code> Password Describes how to change the <code>sysadmin</code> password.	66

6.1 SA System Menu

The `SA System` menu contains the following options: `Printer` and `Close All`. These options are described in the subsections below.

6.1.1 Printer Option

The `Printer` option is used to select a default printer and to view print jobs stored in the local queue. The `Printer` option has a cascading menu that contains two options: `Printer Select` and `Print Jobs`.

6.1.1.1 Printer Select Option

The `Printer Select` option is used to select a default printer. After selecting the `Printer Select` option, the `Printer Selector` window appears (Figure 4). The window shows all printer selections. The default printer will be highlighted. To change the default printer, click on a different printer to highlight it and click on the `OK` button.

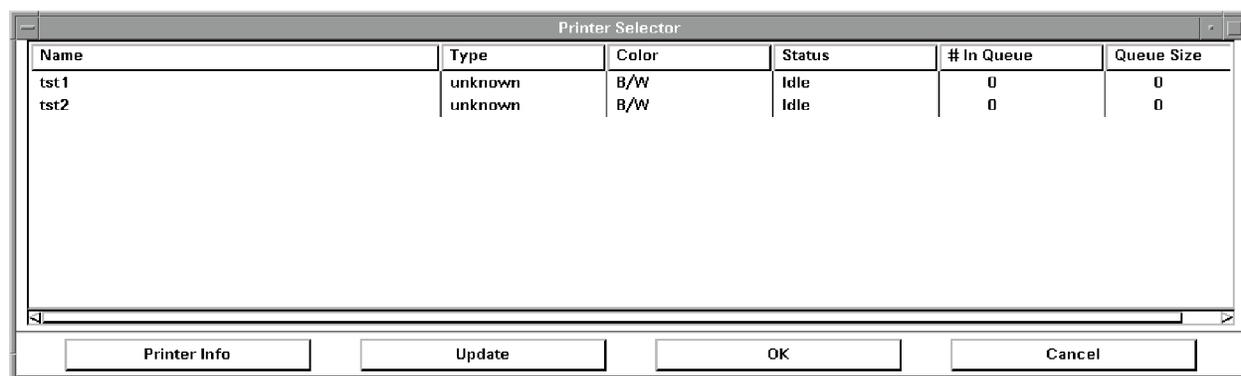


Figure 4. Printer Selector Window

Printer Selector Window Fields

The `Printer Selector` window has the following fields: `Name`, `Type`, `Color`, `Status`, `# In Queue`, and `Queue Size`. These fields are described below.

Name

Lists printer names. The printer selections listed in this field are selected using the `Admintool` for Solaris and `SAM` for HP. `Admintool` and `SAM` are located in the `Application Manager - SA_Default` window. To access this window, double-click on the `Application Manager` control on the `CDE Front Panel` to open the `Application Manager` window, double-click on the `DII_APPS` folder in the `Application Manager` window to open the `Application Manager - DII_APPS` folder, and double-click on the `SA_Default` folder to open the `Application Manager - SA_Default` window.

NOTE: Refer to vendor documentation for information on using `SAM` and `Admintool` to add printers to the `Printer Selector` window.

Type

Shows the printer type.

Color

Shows the viewing option (color or black and white).

Status

Shows the status of the printer. Sample statuses are `Idle` (printer is currently idle), `Busy` (printer is currently processing jobs), `Error` (printer has detected an error), and `Unknown` (unable to determine the printer status).

In Queue

Shows the number of print jobs in the print queue.

Queue Size

Shows the total size of all jobs in the queue.

Printer Selector Window Buttons

The `Printer Selector` window has the following buttons: `Printer Info`, `Update`, `OK`, and `Cancel`. These buttons are described below.

Printer Info

Used to show information about each printer selection listed in the `Printer Selector` window. To show information about print jobs queued to a specific printer listed in the `Printer Selector` window, click on a printer to highlight it and click on the `Printer Info` button. The `PrinterInfo` window appears (Figure 5). This window shows the printer name, server host, printer type, color (e.g., color or black and white), number of jobs in the queue, and queue size for the selected printer. It also shows the user name of the person who sent each print job to the selected printer, each job ID, each job name, and each job size.

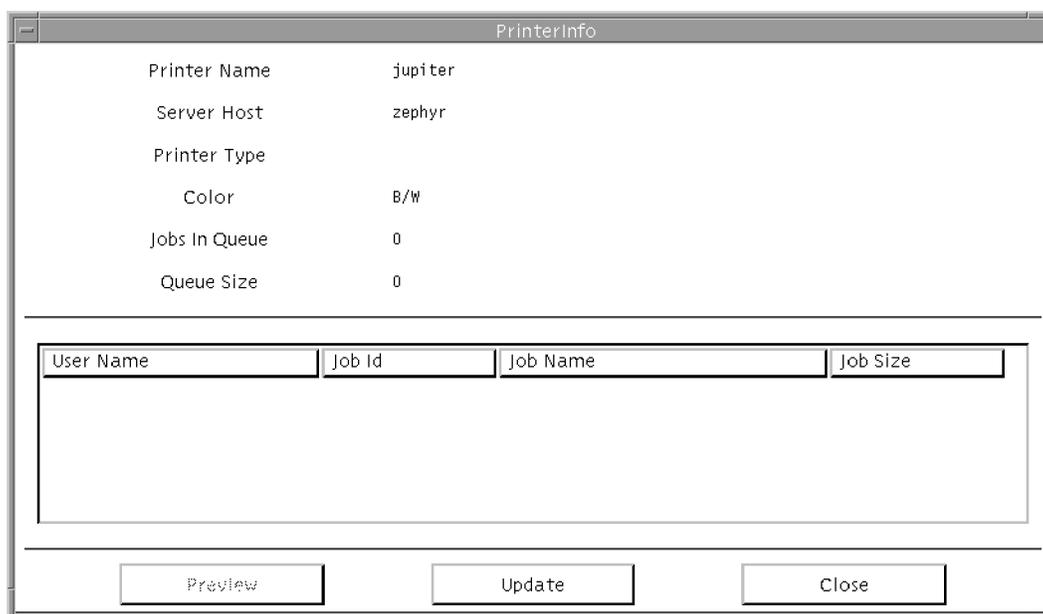


Figure 5. PrinterInfo Window

Update

Used to update entries on the `Printer Selector` window.

OK

Used to save any changes made to the default printer.

Cancel

Used to close the `Printer Selector` window.

6.1.1.2 Print Jobs Option

The `Print Jobs` option is used to allow the user to view the print jobs stored in the local queue. After selecting the `Print Jobs` option, the `Print Queue Manager` window appears (Figure 6).

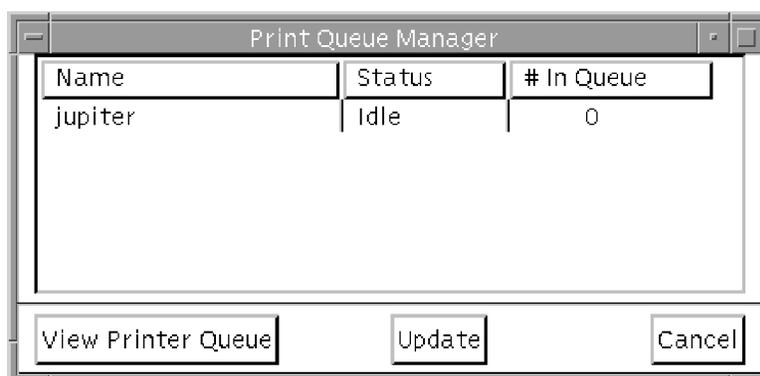


Figure 6. Print Queue Manager Window

Print Queue Manager Fields

The `Print Queue Manager` window has the following fields: `Name`, `Status`, and `# In Queue`. These fields are described below.

Name

Shows the printers supported on the system.

Status

Shows the status of the printer (e.g., `Idle`, `Busy`, `Error`, `Unknown`).

In Queue

Shows the number of print jobs in the print queue.

To show the print jobs for a specific printer listed in the `Print Queue Manager` window, click on a printer in the list to highlight it and click on the `View Printer Queue` button. The `View Printer Queue` button is used to provide information about print jobs in the local queue. The `View Printer Jobs` window appears (Figure 7).



Figure 7. View Printer Jobs Window

View Printer Jobs Window Fields

The View Printer Jobs window has the following fields: Job ID, User Name, File Name, and Size. These fields are described below.

Job ID

Shows the ID number automatically assigned by the system.

User Name

Shows the name of the user who sent the job to the printer.

File Name

Shows the name of the file sent to the printer.

Size

Shows the size of the print file in bytes.

View Printer Jobs Window Buttons

The View Printer Jobs window has the following buttons: Move To Front, Remove Job, Update, and Close. These buttons are described below.

Move To Front

Used to change the priority of a selected print job in the printer queue. To move a print job to the front of the queue, click on the print job in the View Printer Jobs window to highlight it and click on the Move To Front button.

Remove Job

Used to remove a print job from the printer queue. To remove a print job, click on the print job in the View Printer Jobs window to highlight it and click on the Remove Job button.

Update

Used to update entries in the View Printer Jobs window.

Close

Used to close the View Printer Jobs window and return to the Print Queue Manager window.

6.1.2 Close All Option

The `Close All` option is used to close all the windows launched from the menu bar or from the `DII_APPS` folder. To access the `DII_APPS` folder, double-click on the Application Manager control on the CDE Front Panel to open the Application Manager window. The `DII_APPS` folder is located in this window.

NOTE: The `Close All` option does not close windows opened from the CDE front panel. Refer to Section 5, *Common Desktop Environment*, for more information about CDE.

6.2 Hardware Menu

The Hardware menu contains the following options: `Shutdown System`, `Reboot System`, and `Disk Manager`. These options are described in the following subsections.

6.2.1 Shutdown System Option

The `Shutdown System` option is used to shut down the system safely before powering down the machine.

NOTE: Never power down the system without first executing a shutdown, as described in the steps below. Doing so could cause irreparable damage.

Follow the steps below to shutdown the system.

- STEP 1: **Select the `shutdown system` option.** The `Shutdown` dialog box appears with the following message: `Do you want to shutdown the computer?`
- STEP 2: **Shut down the system.** Click on the `OK` button to continue the shutdown process.
- STEP 3: **Turn off the system.** Turn off the machine when the system is completely down. System messages appear that indicate the system is ready to power down.

6.2.2 Reboot System Option

The `Reboot System` option is used to reboot the system. Follow the steps below to reboot the system.

- STEP 1: **Select the `Reboot system` option.** The `Reboot` dialog box appears with the following message: `Do you want to shutdown and reboot the computer?`
- STEP 2: **Reboot the system.** Click on the `OK` button to reboot the machine. When the reboot is complete, the DII COE Login window appears.

6.2.3 Disk Manager Option

The Disk Manager option provides the following file system management functionality:

- C Mounts file system partitions
- C Formats hard drives
- C Displays hard disk space availability
- C Initializes floppy diskettes.

After selecting the Disk Manager option, the Disk Manager window appears (Figure 8).

FILE SYSTEM	KBYTES USED	AVAIL	%CAP	MOUNTED ON
/dev/dsk/c0t3d0s0	88399	12543	67026	16% /
/dev/dsk/c0t3d0s6	218743	170576	26297	87% /usr
/proc	0	0	0	0% /proc
fd	0	0	0	0% /dev/fd
/dev/dsk/c0t3d0s3	81559	14448	58961	20% /var
swap	133772	40	133732	0% /tmp
/dev/dsk/c0t3d0s7	1417550	486091	789709	38% /h
/dev/dsk/c0t1d0s7	1952573	1596691	160632	91% /home2
/dev/dsk/c0t3d0s4	9895	440	8475	5% /security1

Buttons: REFRESH, MOUNT, MOUNT NEW, UNMOUNT, INIT FD, NEWFS, EXPORTFS, EXIT

Figure 8. Disk Manager Window

A mounted file system can be accessed for read and write operations. Mounted file systems are highlighted in yellow.

Disk Manager Window Buttons

The Disk Manager window has the following buttons: REFRESH, MOUNT, MOUNT NEW, UNMOUNT, INIT FD, NEWFS, EXPORTFS, and EXIT. These buttons are described below.

REFRESH

Used to update file system entries in the Disk Manager window.

MOUNT

Used to attach an existing file system listed in the Disk Manager window to a directory, thereby making the files available to the user. Follow the steps below to mount a file system.

- STEP 1: **Select a file system to be mounted.** Click on a file system in the Disk Manager window to highlight it.
- STEP 2: **Click on the MOUNT button.** The MOUNT FILE SYSTEM window appears (Figure 9).

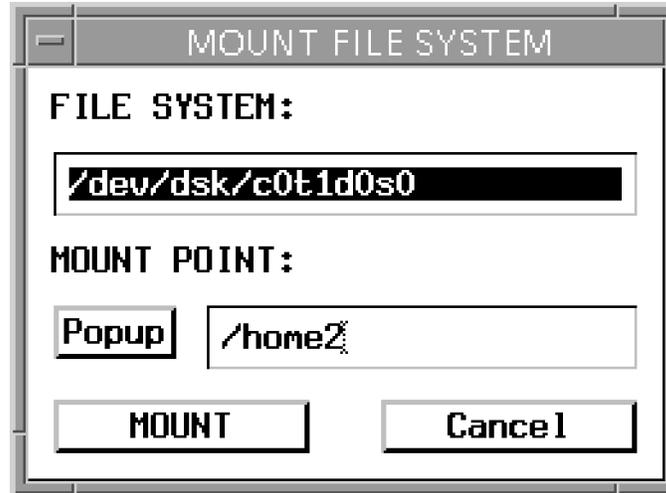


Figure 9. MOUNT FILE SYSTEM Window

STEP 3: Select an unused location as a mount point for the file system. Enter a mount point in the `MOUNT POINT` field. Enter a mount point in one of two ways:

- (a) Type the location, if known, in the `MOUNT POINT` field.

OR

- (b) Toggle on the `Popup` checkbox to the left of the `MOUNT POINT` field to open the `CHOOSE MOUNT POINT` window (Figure 10). Click on a mount point from the scroll list to select it. The `MOUNT FILE SYSTEM` window reappears with the new mount point in the `FILE SYSTEM` field.

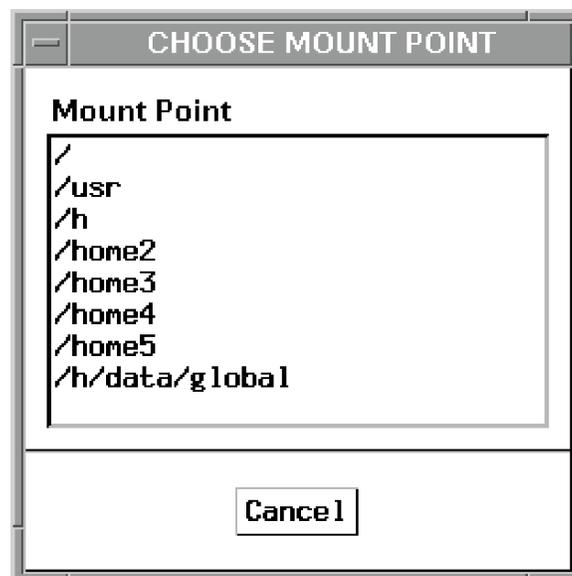


Figure 10. CHOOSE MOUNT POINT Window

STEP 4: Mount the file system. Click on the `MOUNT` button in the `MOUNT FILE SYSTEM` window.

STEP 5: Determine if the file system should be mounted each time the system is rebooted. Select `YES` or `NO` at the following prompt: `Do you want to permanently mount the file system?` If you select `NO`, then that data will not be available to the user the next time the machine is rebooted.

MOUNT NEW

Used to identify a new file system and attach it to a directory, thereby making that directory structure available to the user. Once mounted, the file system is listed in the `Disk Manager` window. Follow the steps below to identify a new file system:

STEP 1: Click on the `MOUNT NEW` button. The `MOUNT FILE SYSTEM` window appears (Figure 9).

STEP 2: Select the new file system to be created. Enter the new file system name in the `FILE SYSTEM` field.

STEP 3: Select an unused location as a mount point for the file system. Enter a mount point in the `MOUNT POINT` field to select an unused location to mount the file system. Enter a mount point in one of two ways:

(a) Type the location, if known, in the `MOUNT POINT` field.

OR

(b) Toggle on the `Popup` checkbox to the left of the `MOUNT POINT` field to open the `CHOOSE MOUNT POINT` window (Figure 10). Click on a mount point from the scroll list to select it. The `MOUNT FILE SYSTEM` window reappears with the new mount point in the `FILE SYSTEM` field.

STEP 4: Mount the new file system. Click on the `MOUNT` button in the `MOUNT FILE SYSTEM` window.

STEP 5: Determine if the file system should be mounted each time the system is rebooted. Select `YES` or `NO` at the following prompt: `Do you want to permanently mount the file system?` If you select `NO`, then that data will not be available to the user the next time the machine is rebooted.

UNMOUNT

Used to unattach a file system listed in the `Disk Manager` window to a directory. When a file system is unmounted, the files become unavailable to the user, yet they remain intact.

NOTE: A file system that is in use cannot be unmounted.

Follow the steps below to unmount a file system.

- STEP 1: **Select a file system to be unmounted.** Click on a file system in the `Disk Manager` window to highlight it.
- STEP 2: **Click on the UNMOUNT button.**
- STEP 3: **Determine if the file system should be permanently unmounted.** Select YES or NO at the following prompt: DO YOU WANT TO PERMANENTLY UNMOUNT THE FILESYSTEM? If you select NO, then that data will be available to the user the next time the machine is rebooted.

INIT FD

Used to format a floppy diskette. Follow the steps below to format a floppy diskette.

- STEP 1: **Click on the INIT FD button.**
- STEP 2: **Confirm that the floppy diskette should be formatted.** Click on the CONTINUE button in the WARNING window to initialize the disk, or click on the CANCEL button to return to the `Disk Manager` window.

WARNING: The INIT FD option erases the entire contents of the floppy diskette.

NEWFS

Used to reformat a selected device to create a new file system. Follow the steps below to create a new file system.

WARNING: All data on the selected device will be deleted. No partitions are protected from NEWFS. Therefore, it is advised that you back up any data you want to save before beginning any NEWFS procedure.

STEP 1: Click on the **NEWFS** button. The `New File System` window appears (Figure 11).



Figure 11. New File System Window

STEP 2: Select the disk device to be reformatted. Select the device in one of two ways: Type the name of the disk device in the `DISK DEVICE` field or click on the arrow and then click on a disk device from the list to select it.

STEP 3: Reformat the selected device. Click on the `OK` button to reformat the selected device.

STEP 4: Confirm that the new file system should be created. Click on the `CONTINUE` button in the `WARNING` window to format the device, or click on the `CANCEL` button to discard the process.

EXPORTFS

Used to export or unexport a file system in order to allow or deny file system sharing. Select the `EXPORTFS` option to open the `Export/Unexport File Systems` window (Figure 12).

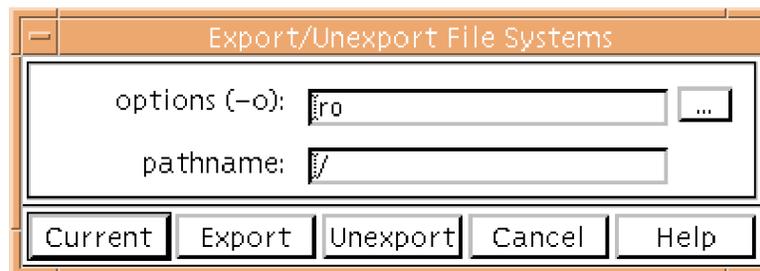


Figure 12. Export/Unexport File Systems Window

Export/Unexport File Systems Window Buttons

Current

Used to show the file systems that are currently exported (shared).

Export

Used to export (share) a selected file system permanently.

Unexport

Used to unexport (deny file system sharing to) a selected file system permanently.

Cancel

Used to close the Export/Unexport File Systems window.

Help

Used to show a manual page for the EXPORTFS option.

Follow the steps below to export a file system.

- STEP 1: Select a file system.** Click on a file system in the list in the Disk Manager window to highlight it and then click on the EXPORTFS button. The Export/Unexport File Systems window appears (Figure 12).
- STEP 2: Enter options.** Click on the options field toggle to view a list of options. Click on one or more options from the list (e.g., read only, read/write) to select them. The options then appear in the options field.
- STEP 3: Enter a pathname.** Enter the actual pathname of the directory you want to share in the pathname field.
- STEP 4: Export the file system.** Click on the Export button.
- STEP 5: Determine if the file system should be exported or unexported permanently.** Click on the Yes or the No button when the following prompt appears: Do you want to permanently export the file system? The window closes.
- STEP 6: Confirm that the file was exported.** Click on the Current button in the Disk Manager window. The shared directory should appear in the list of exported file systems.

NOTE: Refer to the EXPORTFS manual page for more information about the EXPORTS option. Click on the Help button in the Export/Unexport File Systems window to view the EXPORTFS manual page.

EXIT

Used to close the Disk Manager window and exit the Disk Manager option.

6.3 Software Menu

The Software menu contains two options: Segment Installer and Segment Installation Server. These options are described in the following subsections.

6.3.1 Segment Installer Option

The Segment Installer option is used to install segments. Select the Segment Installer option to open the Installer window (Figure 13).

NOTE: Ensure that you can see the whole window by clicking on the bottom right edge of the window and dragging the trackball or mouse outward to enlarge the window.

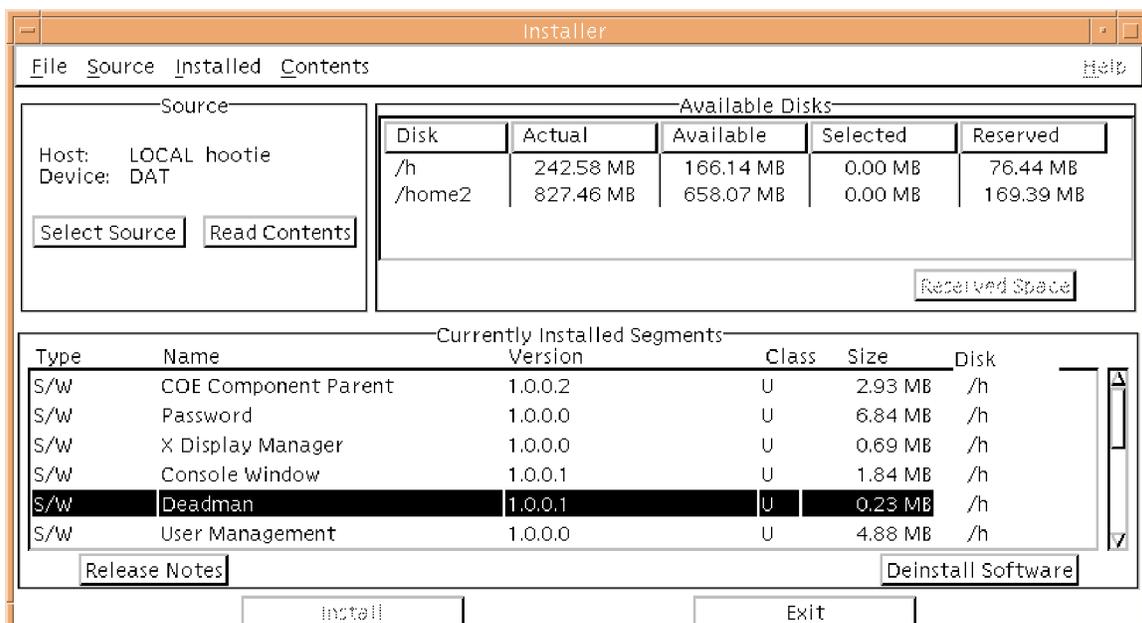


Figure 13. Installer Window

6.3.1.1 Installer Window Pull-down Menus

The Installer window has the following pull-down menus: File, Source, Installed, and Contents. These pull-down menus are described below.

File

The File pull-down menu contains the following options: Install and Exit.

Install

Allows the user to install selected segments. Performs the same functionality as clicking on the Install button. Refer to Subsection 6.3.1.2, *Installer Window Panels*, for more information about the Install button.

Exit

Exits the user from the `Installer` window. Performs the same functionality as clicking on the `Exit` button. Refer to Subsection 6.3.1.2, *Installer Window Panels*, for more information about the `Exit` button.

Source

The `Source` pull-down menu contains the following options: `Select Source` and `Read Contents`.

Select Source

Displays the currently selected installation media. Performs the same functionality as clicking on the `Select Source` button. Refer to Subsection 6.3.1.2, *Installer Window Panels*, for more information about the `Select Source` button.

Read Contents

Allows the user to read the table of contents of the selected installation device. Performs the same functionality as clicking on the `Read Contents` button. Refer to Subsection 6.3.1.2, *Installer Window Panels*, for more information about the `Read Contents` button.

Installed

The `Installed` pull-down menu contains the following options: `Release Notes`, `Deinstall Software`, and `View Installation Log`.

Release Notes

Displays release notes information for any selected segment. Performs the same functionality as clicking on the `Release Notes` button. Refer to Subsection 6.3.1.2, *Installer Window Panels*, for more information about the `Release Notes` button.

Deinstall Software

Allows the user to deinstall segments highlighted in the `Currently Installed Segments` panel. Performs the same functionality as clicking on the `Deinstall Software` button. Refer to Subsection 6.3.1.2, *Installer Window Panels*, for more information about the `Deinstall Software` button.

View Installation Log

Displays a detailed log of the installation process.

Contents

The `Contents` pull-down menu contains the following options: `Release Notes`, `Required Software`, and `Conflicting Software`.

Release Notes

Displays release notes information for any selected segment. Performs the same functionality as clicking on the `Release Notes` button. Refer to Subsection 6.3.1.2, *Installer Window Panels*, for more information about the `Release Notes` button.

Required Software

Lists segments that need to be installed in order to install the segment selected in the `Select Segment To Install` panel. Performs the same functionality as clicking on the `Requires` button. Refer to Subsection 6.3.1.2, *Installer Window Panels*, for more information about the `Requires` button.

Conflicting Software

Lists the segments that cannot be installed with the segment selected in the `Select Segment To Install` panel. Performs the same functionality as clicking on the `Conflicts` button. Refer to Subsection 6.3.1.2, *Installer Window Panels*, for more information about the `Conflicts` button.

6.3.1.2 Installer Window Panels

The `Installer` window has the following panels: `Source`, `Available Disks`, `Currently Installed Segments`, and `Select Software To Install`. The `Select Software To Install` panel does not appear in the `Installer` window shown in Figure 13—it only appears after the `Read Contents` button has been selected in the `Source` panel. The `Installer` window panels are described below.

Source

Displays the name of the host machine, the name of the installation device, and the table of contents of that installation device. The `Source` panel has two buttons: `Select Source` and `Read Contents`.

Select Source

Used to display the currently selected installation media. Click on the `Select Source` button to open the `Select Source` window (Figure 14). This window allows the user to select the installation source device. The device selection defaults to the `DAT` drive on the local machine (the `LOCAL` option in the `Host` panel and the `DAT` option in the `Device` panel).

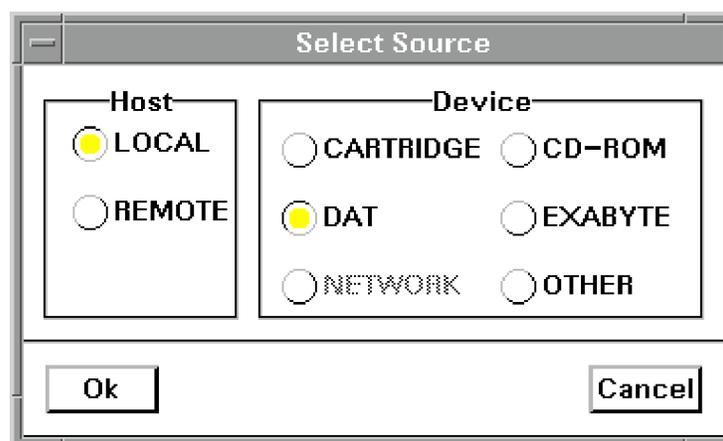


Figure 14. Select Source Window

Read Contents

Used to read the table of contents of the selected installation device. Click on a segment listed in the `Installer` window to highlight it and then click the `Read Contents` button. The media will be scanned for the segments that it contains, and then the `Installer` window will add the `Select Software To Install` panel, which lists the segments that the media contains (Figure 15). Any number of segments may be selected in this panel for installation. See Section 6.3.1.3, *Installing Segments*, for additional information about the segment installation process.

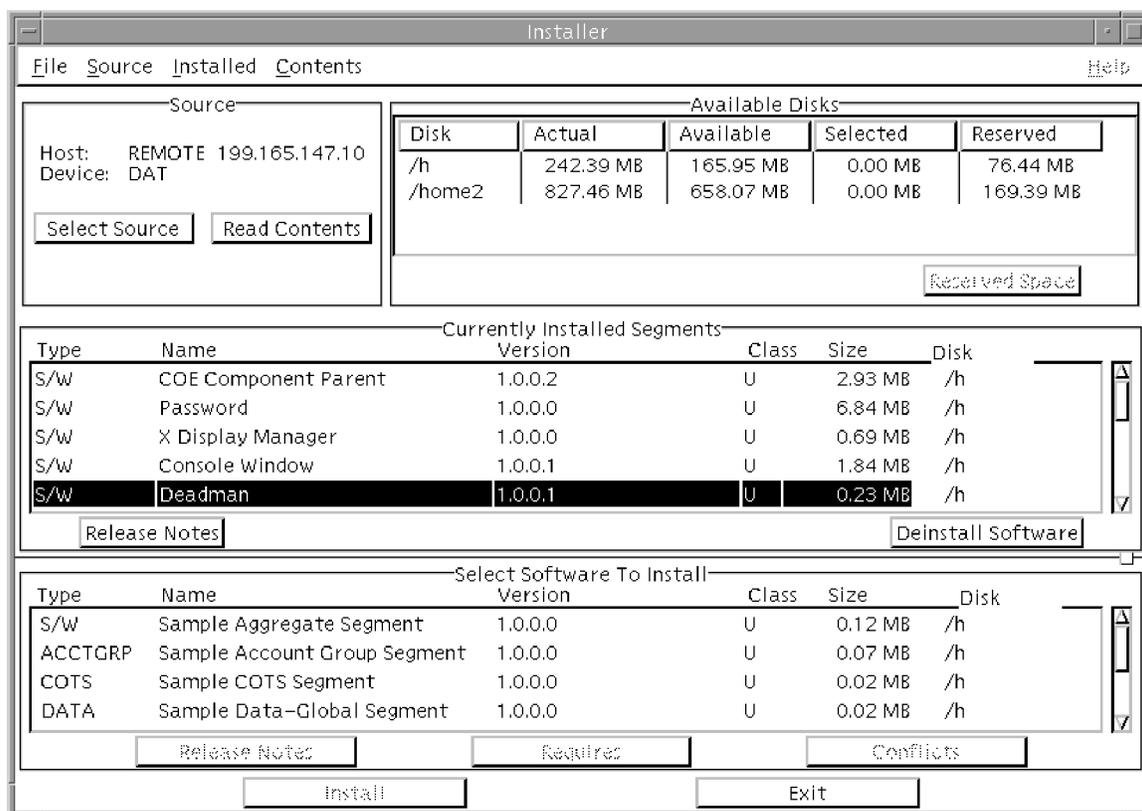


Figure 15. Installer Window with Select Software To Install Panel

Available Disks

Displays the mounted disk drives on the system and the remaining available disk space. The amount of available disk space decreases as segments are selected for installation. This panel has five fields: `Disk`, `Actual`, `Available`, `Selected`, and `Reserved`.

Disk

Shows each available disk.

Actual

Shows the total size of each disk.

Available

Shows the free space that is available on each disk for installing segments.

Selected

Shows the size of the segment(s) you want to add or remove based on your selection of one or more segments in the `Currently Installed Segments` panel.

Reserved

Shows the amount of space on each disk that is already in use or pre-allocated (reserved) by previously installed segments.

The `Available Disks` panel has the following button: `Reserved Space`. The system automatically reserves a certain amount of space on each available disk to allow for segment growth. The `Reserved Space` button allows the reserved disk space to be modified for a particular installation. To modify reserved disk space for a particular installation, click on a disk in the list to highlight it and then click on the `Reserved Space` button to open the `Override Disk Space Allocation` window (Figure 16). The `Override Disk Space Limits` pop-up menu allows the user to choose between 80 percent and 100 percent of space to install the segment.

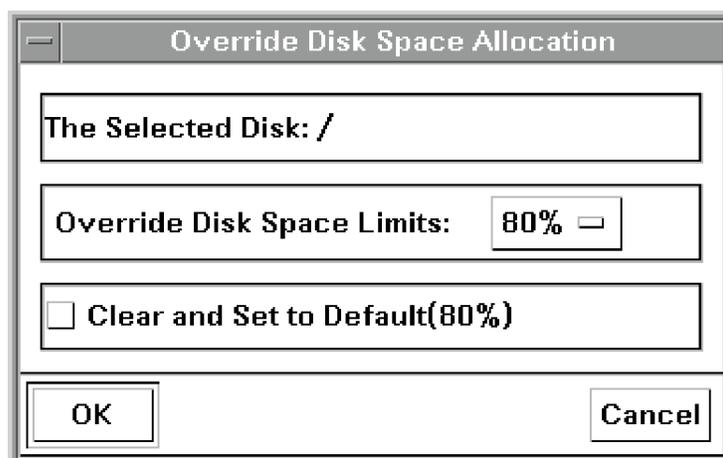


Figure 16. Override Disk Space Allocation Window

Currently Installed Segments

Lists the segments that are currently installed. The `Currently Installed Segments` panel lists the type, name, version number, classification, size, and disk (mount point) of each currently installed segment. This panel has two buttons: `Release Notes` and `Deinstall Software`.

Release Notes

Displays release notes information for any selected segment. Click on a segment to highlight it and click on the `Release Notes` button to open the `RELEASE NOTES` window (Figure 17). Click on the `PRINT` button to print the release notes.

Deinstall Software

Allows the user to deinstall segments highlighted in the `Currently Installed Segments` panel.

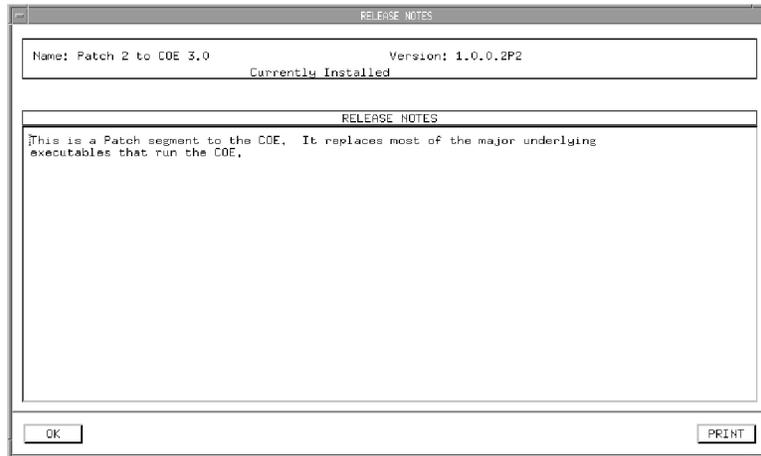


Figure 17. RELEASE NOTES Window

Select Software To Install

Lists the segments that are contained on the selected media and that are not currently installed. The Select Software To Install panel lists the type, name, version number, classification, size, and mount point (disk) of each segment contained on the media. This panel has five buttons: Release Notes, Requires, Conflicts, Install, and Exit.

Release Notes

Displays release notes information for any selected segment. Click on a segment to highlight it and click on the Release Notes button to open the RELEASE NOTES window (Figure 17). Click on the PRINT button to print the release notes.

Requires

Lists segments that need to be installed in order to install the segment selected in the Select Segment To Install panel. Click on a segment to highlight it and click on the Requires button to open the REQUIRED SEGMENTS window (Figure 18).

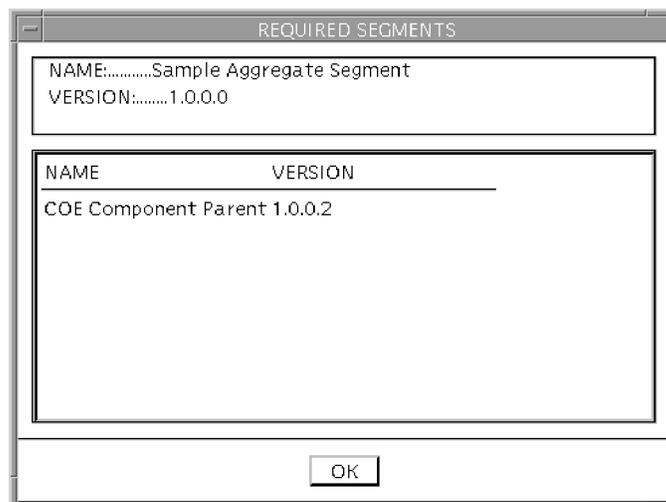


Figure 18. REQUIRED SEGMENTS Window

Conflicts

Lists the segments that cannot be installed with the segment selected in the `Select Segment To Install` panel. Click on a segment to highlight it and click on the `Conflicts` button to open the `CONFLICTING SEGMENTS` window (Figure 19).

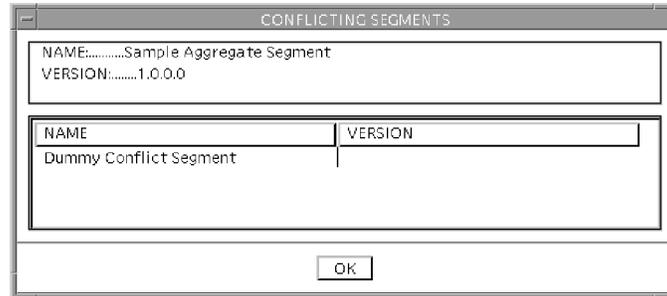


Figure 19. `CONFLICTING SEGMENTS` Window

Install

Allows the user to install selected segments.

Exit

Exits the user from the `Installer` window.

6.3.1.3 Installing Segments

Follow the steps below to install segments using the `Segment Installer` option.

- STEP 1: Select the installation device.** Click on the `Select Source` button in the `Source` panel to open the `Select Source` window (Figure 14). Select the device to use as the installation source device. Select `NETWORK` if you are installing a segment from the segment installation server. Refer to Section 6.3.2, *Segment Installation Server Option*, for information about loading segments on the segment installation server.
- STEP 2: Read the table of contents of the selected installation device.** Click on the `Read Contents` button in the `Source` panel. The media will be scanned for the segments that it contains, and then the `Installer` window will add the `Select Software To Install` panel, which lists the segments that the media contains (Figure 15). Any number of segments may be selected in this panel for installation.
- STEP 3: Select the segments that you want to install.** Click on one or more segments in the `Select Software To Install` panel. The `Available Disks` panel then displays the mounted disk drives on the system and the remaining available disk space as segments are selected.

STEP 4: Begin the installation process for the selected segments. Click on the `Install` button once all desired segments are selected. The `Installer Status` window appears, which shows the number of segments to be installed and the size of each segment being installed. This window also shows a `Percent Complete` status bar, which shows the status of the installation.

STEP 5: Display a detailed log of the installation process. Select the `Installation Log` option from the `Installed` pull-down menu once installation has completed.

6.3.2 Segment Installation Server Option

The `Segment Installation Server` option is used to load segments onto a segment server. Loading a segment is different than installing a segment. Loading a segment on a machine stores the segment on the machine, but does not enable the segment to run. Instead, segments stored on a segment installation server are available for installation without the installation media because they are located on a server. Segments can, then, be installed individually on each machine on the network.

Click on the `Segment Installation Server` option to open the `Segment Installation Server` window (Figure 20). This window is identical to the `Installer` window, with the following exceptions:

- C The `Load` option in the `File` pull-down menu replaces the `Install` option.
- C The `Load` button replaces the `Install` button.
- C The `Segments Currently Loaded On This Network Server` panel replaces the `Currently Installed Segments` panel.

NOTE: Ensure that you can see the whole window by clicking on the bottom right edge of the window and dragging the trackball or mouse outward to enlarge the window.

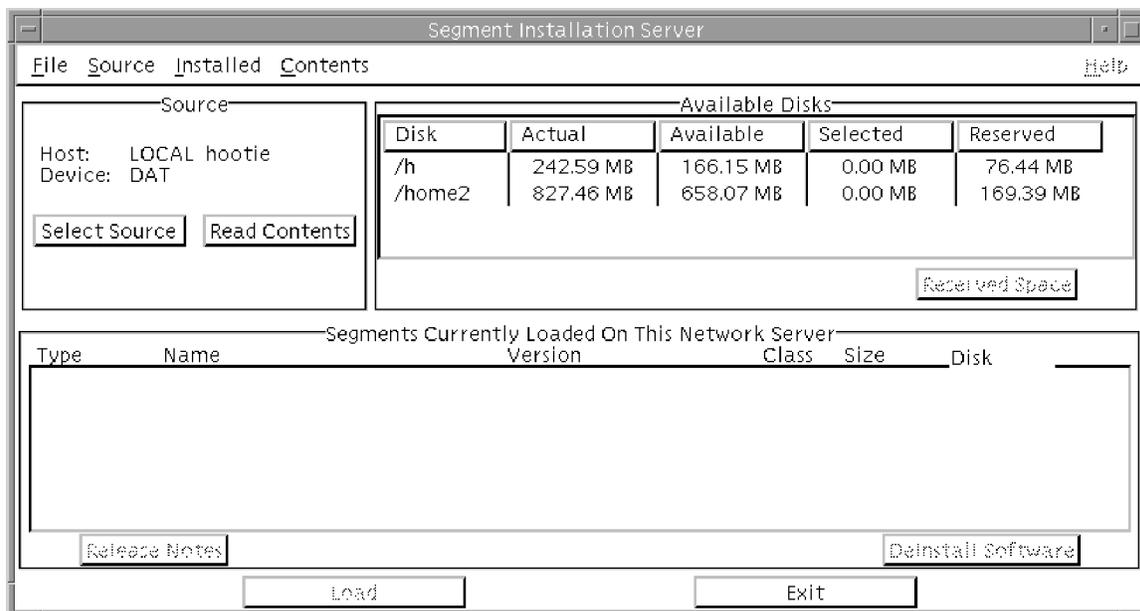


Figure 20. Segment Installation Server Window

6.3.2.1 Loading Segments on the Segment Installation Server

NOTE: The following must be done for the network installation to be successful:

- C The `/h/data/global` directory must be mounted to a common machine. If `/h/data/global` is not mounted, use the `Disk Manager` option from the `Hardware` pull-down menu to mount it (see Subsection 6.2.3, *Disk Manager Option*).
- C Segments installed from a segment installation server must have been loaded on `/home2` or on any other exported file system on the server machine; if they are not, the `COEInstaller` will not be able to access the segments. The machine that the segments are being installed from must be in the target machine's host file or, if running DNS, then the host must be in the DNS file.

Follow the steps below to load a segment on the segment installation server.

- STEP 1: Select a server on which to load segments.** Select a disk in the `Available Disks` panel. A list of segments, which can be installed from the `Installer` window, is created automatically in the `/h/data/global` directory and is updated each time a segment is loaded using this option.
- STEP 2: Select the installation device.** Click on the `Select Source` button in the `Source` panel to open the `Select Source` window (Figure 14). Select the installation source device and then click on the `OK` button.

- STEP 3: Select the segments that you want to load.** Click on one or more segments in the `Select Software To Install` panel. The `Available Disks` panel then displays the mounted disk drives on the system and the remaining available disk space as segments are selected.
- STEP 4: Begin the load process for the selected segments.** Click on the `Load` button once all desired segments are selected. The `Installer Status` window appears, which shows the number of segments to be loaded and the size of each segment being loaded. This window also shows a `Percent Complete` status bar, which shows the status of the load.
- STEP 5: Display a detailed log of the load process.** Select the `Installation Log` option from the `Installed` pull-down menu once the load has completed.

Follow the steps in Section 6.3.1.3, *Installing Segments*, to install one or more segments on a machine.

6.4 Network Menu

The `Network` menu contains the following options: `Change Machine ID`, `Edit Local Hosts`, `Set System Time`, `Servers`, and `DCE`. These options are described in the following subsections.

6.4.1 Change Machine ID Option

Use the `Change Machine ID` option to select a name and IP address for a machine. Click on this option to open the `CHANGE MACHINE ID` window (Figure 21). The machine's current name and IP address appear in the `MACHINE NAME` and `MACHINE ADDRESS` fields.

NOTE: A machine's name (ID) and IP address are selected initially during system installation.

NOTE: All machines must have unique names and addresses—the system does not permit two machines to have the same name and address.

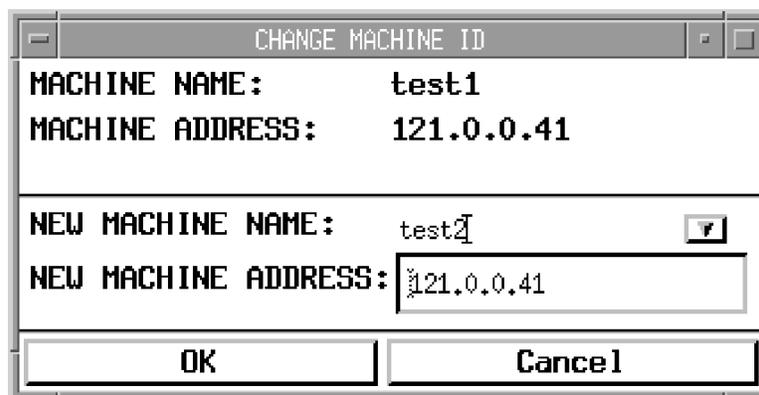


Figure 21. CHANGE MACHINE ID Window

Follow the steps below to change the machine ID.

STEP 1: Select a new machine. Click on the arrow to the right of the `NEW MACHINE NAME` field to display a pop-up list of valid IDs.

STEP 2: Select an ID. Click on an ID to select it.

NOTE: User-defined names may be assigned to each machine using the `Edit Local Hosts` option before changing the machine ID (see Subsection 6.4.2, *Edit Local Hosts Option*).

STEP 3: Click on the ok button. The `MACHINE NAME` and `MACHINE ADDRESS` fields update to reflect the new machine name and address.

STEP 4: Reboot the machine. Reboot the machine after changing the name for the change to take effect.

NOTE: Do not modify the `NEW MACHINE ADDRESS` field. Machine addresses are predefined for each ID.

6.4.2 Edit Local Hosts Option

The `Edit Local Hosts` option lists the machines that can be accessed from a user's machine. This option can only be used on local workstation files. Use this option to do the following:

- C Add or remove machines from the list of machines that can be accessed
- C Modify machine information, such as machine name, IP address, or aliases.

Select the `Edit Local Hosts` option to open the `EDIT HOSTS` window (Figure 22).



Figure 22. EDIT HOSTS Window

Follow the steps below to modify machine information. These steps must be performed for each machine you want to modify.

- STEP 1: Modify host file information.** Use the `Edit Local Hosts` option to add or remove machines from the list or to modify machine information. Once you have completed the selected action, the machine remains in the `EDIT HOSTS` window labeled with `A` (add), `M` (modify), or `D` (delete) in the `*` column. Click on the `OK` button to accept the changes, or click on the `CANCEL` button to discard the changes.
- STEP 2: Assign the machine a new machine name.** Assign the machine a new machine name using the `Change Machine ID` option (see Subsection 6.4.1, *Change Machine ID Option*).
- STEP 3: Reboot the machine.** Reboot the machine at the prompt if you modified the current hostname in order for changes to take effect.

6.4.2.1 EDIT HOSTS Window Fields

The `EDIT HOSTS` window has the following fields: `*` (asterisk), `MACHINE NAME`, `IP ADDRESS`, and `ALIASES`. These fields are described below.

*** (asterisk)**

Shows pending changes made to the machine. Labels include `A` (add), `D` (delete), `M` (modify), and `T` (trusted).

The label `T` indicates a trusted machine. A trusted machine can be accessed from another machine on the same LAN (e.g., to access a tape drive for remote installation). A trusted machine is one that can access the user's disk and perform remote shell commands.

MACHINE NAME

Shows the name of the machine. The machine name can be system or user defined.

IP ADDRESS

Shows a unique IP address.

ALIASES

Shows other names by which a machine is also known, if applicable.

6.4.2.2 EDIT HOSTS Window Buttons

The `EDIT HOSTS` window has the following buttons: `ADD`, `DELETE`, `EDIT`, `EXPORT`, `CANCEL`, and `OK`. These buttons are described below.

ADD

Used to add a machine to the local host table to make it available to the local machine. Follow the steps below to add a machine to the local host table.

STEP 1: **Click on the ADD button.** The ADD MACHINE window appears (Figure 23).



Figure 23. ADD MACHINE Window

STEP 2: **Enter the new machine name.** Type a name in the NEW MACHINE NAME field. Allowable characters are alphanumeric and the underscore symbol (_). In addition, the first character of the machine name must be a letter.

STEP 3: **Enter the machine's IP address.** Type the IP address of the new machine in the NEW MACHINE ADDRESS field.

STEP 4: **Define the new machine as a trusted machine.** Click on the TRUSTED MACHINE checkbox toggle.

STEP 5: **Add aliases for a machine, if desired.** Click on the ALIASES button in the ADD MACHINE window to open the ALIASES window (Figure 24).

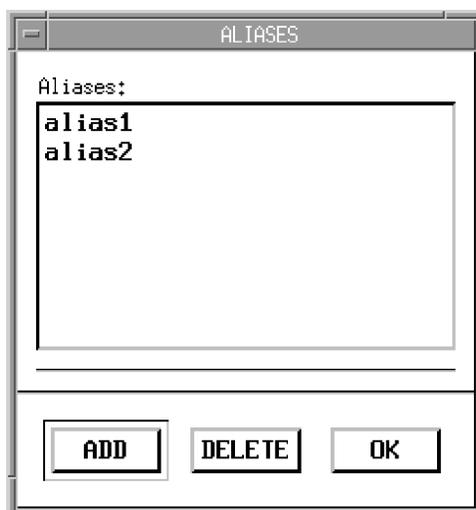


Figure 24. ALIASES Window

To add an alias, click on the ADD button. The ADD ALIAS window appears (Figure 25). Type a new alias in the NEW ALIAS field and then press [RETURN] to

accept the new alias. Allowable characters are alphanumeric and the underscore symbol (`_`). In addition, the first character of the machine name must be a letter. The `ALIASES` window reappears.



Figure 25. ADD ALIAS Window

STEP 6: Close the `ALIASES` window and save the changes. Click on the `OK` button. The `ADD MACHINE` window returns to the forefront.

STEP 7: Determine if the machine should be added to the list of available machines. Click on the `OK` button to mark the machine as an addition to the list of available machines on the local host table, or click on the `CANCEL` button to discard the changes. The `ADD MACHINE` window closes.

DELETE

Used to delete a machine from the local host table. Follow the steps below to delete a machine from the local host table.

STEP 1: Select a machine. Click on a machine in the list to highlight it.

STEP 2: Click on the `DELETE` button. The `DELETE MACHINE` dialog box appears with the following prompt: Mark machine [machine name] for deletion?

STEP 3: Confirm whether or not the machine should be deleted. Click on the `YES` button to confirm that the machine should be deleted, or click on the `NO` button to cancel the deletion.

EDIT

Used to edit a machine name. Click on a machine name to highlight it and click on the `EDIT` button to open the `EDIT MACHINE` window (Figure 26). The `EDIT MACHINE` window functions the same as the `ADD MACHINE` window (described in **ADD**).

EXPORT

Used to export machine information to other workstations on the local host table. (Not currently implemented.)

CANCEL

Used to close the `EDIT HOSTS` window without saving changes.

OK

Used to save changes and close the window.

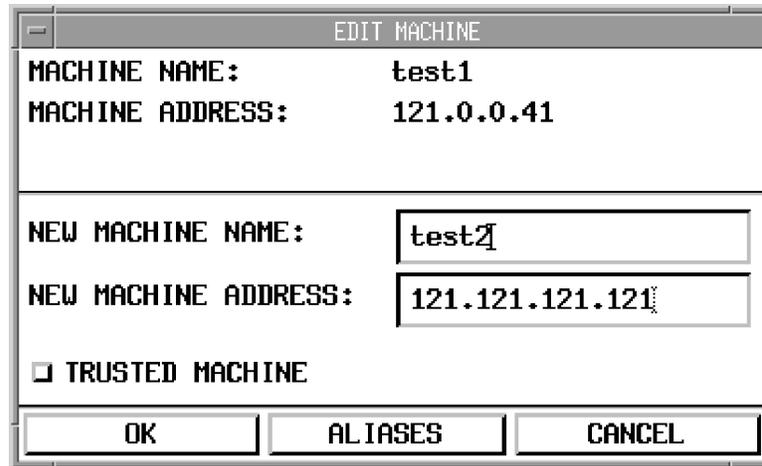


Figure 26. EDIT MACHINE Window

6.4.3 Set System Time Option

The `Set System Time` option is used to set the system time for the machine. Click on the `Set System Time` option to open the `SYSTEM TIME` window (Figure 27).

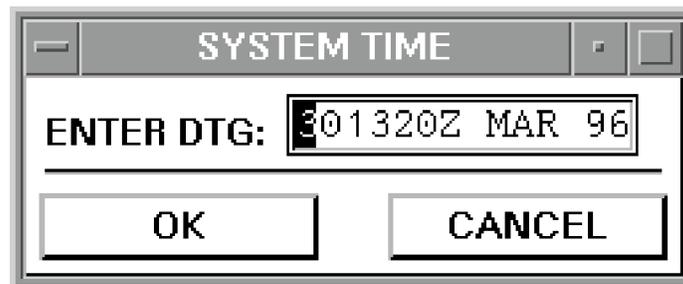


Figure 27. SYSTEM TIME Window

The system time is written as `ddhhmmZ MON YR`, where

- `dd` = day of the month
- `hh` = hour
- `mm` = minute
- `Z` = a constant (for Zulu time)
- `MON` = three-letter month abbreviation
- `YR` = final two digits of the year.

For example, October 15, 1996, 8:19 Zulu time would read: `150819Z OCT 96`.

To set the system time, follow the steps below:

- STEP 1: Enter the new system time.** Enter the new system time in the `ENTER DTG` field in the format `ddhhmmZ MON YR`.
- STEP 2: Set the new system time for the machine.** Click on the `OK` button to accept the new entry, or click on the `CANCEL` button to discard the entry.

6.4.4 Servers Option

The `Servers` option is a cascading menu that has four options: `Set DNS`, `Set Routes`, `Set Mail`, and `Set NIS`. These options are described in the following subsections.

6.4.4.1 Set DNS Option

The `Set DNS` option allows the system administrator to configure a workstation as either a Domain Name Server (DNS) client or a DNS server if DNS, rather than the local host table, is used to store host name IP address information. Figure 28 shows the `DNS Setup` window. The `Set DNS` option creates the `nameserver` configuration file upon a positive response. If the `This system is primary DNS server` toggle is checked, the `Set DNS` option installs a set of DNS template files to `/var/nameserver`. The `DNS` option allows the system administrator to enter the IP address of the primary and secondary name servers. Selecting the toggle also allows the system administrator to specify suffixes of machine names instead of IP addresses, as well as specify domain name suffixes of machines for the local domain instead of IP addresses.

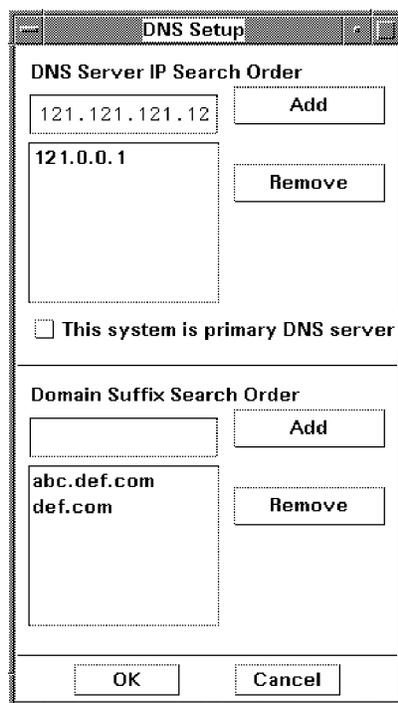


Figure 28. DNS Setup Window